1: Whiting E-5 (1936-1937) 1941
OJ13 Kwoma OJ13

821 776 just as he did as a child. He still believes that rain and wind storms, thunder and lightning, earthquakes, and rainbows are caused by angry *marsalai*.[28] Although he takes care not to walk near the dwelling places of these supernatural beings, he reacts aggressively toward them after they have brought about the annoying natural event. If a storm is brewing, a Kwoma man will customarily repeat an imprecation: "Cursed *marsalai* who is causing this storm to come, may you be killed. May you be bound hand and foot so that you cannot move. May you be stuffed in the bottom of a hollow tree so that you may no longer annoy us with rain and wind."[29] At the end of each line of the imprecation, the cursing man spits toward the oncoming storm.

753 755 [776] Many Kwoma men learn to abstract the unseen sago needles which *marsalai* sometimes shoot into the feet of those who disturb them. The method employed consists of rubbing the painful spot with a leaf and of repeating a malediction which supposedly causes the needle to come near to the surface. The operator then sucks the painful spot, extracts the needle, and spits it on a coconut leaf, which is wrapped up, immersed in water for a time, and then thrown away.

825 776 When the clouds of mosquitoes are thicker and hungrier than usual, it is believed to be the work of *marsalai*. A huge supernatural crocodile is supposed to live somewhere in the great swamp below the range on which the Kwoma dwell. Mosquitoes make their home in the belly of this monster and swarm out to pester the Kwoma when he opens his mouth. 825 776 989 When this occurs, or rather when the mosquitoes are so thick that it is believed to have occurred, the men of one or another of the Kwoma hamlets will beat a special rhythm on the house tamberan gongs, a message to this *marsalai*, angrily commanding him to shut his mouth. The men of other ham-

[823] [28] Earthquakes are believed to be caused by a huge *marsalai* when he thrusts his digging stick into the ground as he plants yams. If anyone should approach his swamp dwelling, the Kwoma fear that mountains would be leveled by the terrible quake that would ensue. Rainbows are thought to be caused by another *marsalai* when he spits betel juice through the sky.

[29] The curse is repeated for all the *marsalai* who are suspected in the particular instance.

1: Whiting E-5 (1936-1937) 1941
OJ13 Kwoma OJ13

121 861 or beaten by his teachers. Thus a strong habit of heeding whatever warning a teacher may issue is built up in every Kwoma individual. As a result, Kwoma teachers may warn 121 869 their pupils concerning dangers which do not exist and expect that their pupils will heed. This is in fact the case in the inculcation of supernatural beliefs. By means of warnings Kwoma teachers instill in their pupils an unrealistic fear of *marsalai*, ghosts, sorcery, and blood.[1]

[796] *Marsalai* are supposed to be huge monsters in the form of snakes or crocodiles which cause rain and wind storms, earthquakes, and other cosmic phenomena. They are supposed to 869 796 be present at the yam-cult ceremonies and to be responsible for a plentiful yield of this crop. A child is first warned about [862] these monsters early in life. When a Kwoma mother weans her child she warns him not to suckle, lest he be injured by the *marsalai* which has now taken possession of her breast. She sometimes emphasizes this story by putting a bloodsucker [823] on her breast. During childhood a person is warned not to [821] go near or touch certain rocks and waterholes, lest the *marsalai* who dwell therein cause a storm or shoot a sago needle [796] into his foot in anger at being disturbed. He is also warned at this period not to go near the house tamberan during a cult ceremony lest the *marsalai* who are present kill him. He is told that the sounds[2] which he hears are the voices of these [798] monsters. When he is initiated at the beginning of adolescence, he is warned not to look up too suddenly at the cult figures which represent the *marsalai* lest the shock kill him.

869 795 Ghosts are believed to be the spirits of dead Kwoma who live on the outskirts of the tribal territory. Either as invisible shadows or in the form of a bird or an animal, they sometimes visit the hamlet of the living, particularly at night or when a death has occurred. It is believed that they sometimes attack a person, that they can cause accidents by frightening him, that they are eager to take souls to the land of the dead, and that they cause nightmares and fits of possession. Most warn-

[1] Kwoma have other supernatural beliefs, but these four provide the most important sources of unrealistic fear.

[2] Gongs, flutes, and bull-roarers.

869 826 206 *Becoming a Kwoma*

Kwoma children are warned that if they do not allow someone to bleed them when they have a headache, stomach-ache, [157] or sprain, the pain will become worse and they may even become seriously ill. A boy is also warned that if he does not [856] bleed his penis he will not grow up.[1] When the age-grade initiation approaches, a boy is warned that if he does not attend it and have his blood ceremonially let, he will not grow [262] up. Since this operation is performed in a stream, he is warned that if he eats fish he will become sick, for the fish may have been contaminated by his blood. He is warned that if he eats an animal which he has killed with a spear or arrow he will sicken and perhaps die, since his blood enters the animal through his weapon and contaminates its flesh. This warning is reiterated to adults when they begin pig hunting. An adult who plants yams is warned not to eat them lest he become sick, for the seed and produce have become contaminated with his blood.

869 One other unrealistic warning should be mentioned here, 262 because a case involving it will be discussed later. Adoles- 562 cents are warned that if they eat sago flour washed by a 252 woman it will make them sick. The normal procedure in processing sago flour is for the woman, either sister or wife, to crush the pith and for the man to rinse the flour from it.

121 The following case will serve to illustrate the psychologi- 869 cal effect that the above unrealistic warnings usually have • 823 upon a Kwoma pupil. Kar, Mar, Gwiyap, and I were walk- 123 ing through the swamp one day, and the path passed by a waterhole. Kar warned the rest of us not to pass too near it for it was the dwelling place of a *marsalai*. Mar and Gwiyap heeded and passed by the waterhole at a distance. I, however, did not heed, approached the hole, and poked my walking stick into it. The three Kwoma shouted at me for doing this, warning me to stop and scolding me for my temerity. The fact that Mar and Gwiyap passed by the waterhole at a distance can be analyzed thus: the drive was fear evoked by Kar's warning due to the pain which both Mar and Gwiyap

[1] This warning is not made directly but by implication, and the practice is performed in secret. See chap. iv, p. 64.

1: Whiting E-5 (1936-1937) 1941
OJ13 Kwoma OJ13

had previously experienced for not heeding realistic warnings; the response was avoiding the waterhole; the cues were the sight of the waterhole and Kar's instructions; and the reward was the reduction of fear. Since I had not been brought up in Kwoma society, Kar's warning did not evoke fear and I did not make the right response.

Although the technique of warning provides the basis for the inculcation of supernatural fears, several other factors play an important part in this process. One of these factors is the belief that supernatural dangers are similar to real dangers, a fact which strengthens the Kwoma child's fear of them by the principle of secondary generalization.[4]

Since *marsalai* are described as great snakes or crocodiles which live in the swamp, realistic warnings about snakes, crocodiles, and other dangerous animals would tend to generalize to these supernatural monsters. In other words, each time a Kwoma is reinforced for heeding a warning about an animal, particularly a snake or crocodile, he is also somewhat reinforced for heeding warnings about *marsalai*,[5] that is, unrealistic fears. A second source of generalization is that warnings about *marsalai* all concern disturbing their dwelling places. The common word for house is used to describe these supposed dwellings, so that all realistic warnings about trespassing in, and stealing from, the house of human beings also strengthen the warnings about *marsalai*. Finally, *marsalai* are described as being huge. Since large animals and

[4] If two objects are described by the same term, a person tends to respond to them both in a similar manner. Hull has described this as secondary generalization. See C. L. Hull, "The Problem of Stimulus Equivalence in Behavior Theory," *Psychol. Rev.*, XLVI (1939), 9–30. It is also discussed by Miller. See N. E. Miller and John Dollard, *Social Learning and Imitation* (New Haven, 1941), chap. v. Experimental evidence in support of this principle has recently been adduced by Dr. Jane Birge. See J. S. Birge, "The Rôle of Verbal Responses in Transfer" (Doctoral Dissertation, Yale University, 1941). G. P. Murdock has found empirical support for this principle in a study of the generalization of incest taboos by means of common kinship terms.

[5] Kwoma vivify their warnings about *marsalai* by telling children that the sounds they hear at the time of a ceremony are the voices of these monsters. The sounds are in reality produced by gongs, bull-roarers, and flutes, but this theory offers another avenue of generalization from animals to *marsalai* on the basis of the sounds which they both make.

1: Whiting E-5 (1936-1937) 1941
OJ13 Kwoma OJ13

796 182 121 to be that it provides a means of artistic expression. Cult ceremonies furnish the chief opportunity for singing, dancing, rhythmic gong beating, flute playing, and the manufacture of carved figures. Numerous important integrative functions [554] are also fulfilled by the yam cult. It provides one of the bases for the social stratification of men, differentiating four prestige positions: boys who do not belong to the cult, members of the first stage, members of the second stage, and members of the final stage. The yam cult is closely integrated with head-hunting, in that only those who have taken a head can [562] become members of the highest stage. The yam cult excludes women and thus helps to define their status and to maintain the division of labor by sex. Through such exclusion it provides a socially accepted means for men to express their ag- [786] gressive feelings toward women. It also provides an opportunity for ceremonial license. Finally, the yam cult is associated with agriculture. The cult is thus an important institution, closely integrated into Kwoma culture, and to tamper with its charter by refusing to believe in *marsalai* is something which no pupil or teacher could lightly do.

121 182 796 821 Beliefs in *marsalai*, in addition to forming part of the charter of the yam cult, provide an explanation for cosmic events and a means of controlling them. Bad rain and wind storms, earthquakes, and rainbows[17] are thought to be produced by these monsters. These beliefs permit a Kwoma to • [823] perform certain practices which are thought to control them. [782] In the first place he can avoid disturbing them, and in the second place he can utter an aggressive prayer which he believes [781] will stop the storm or earthquake.[18] Thus, both because beliefs in *marsalai* form an integral part of the yam cult and because they perform other functions as well, Kwoma teachers would be very loath to cease believing in them, even if events made them skeptical of their supposed powers.

[132] [17] Wind storms and earthquakes not infrequently destroy Kwoma dwellings and are thus seriously dangerous.

[18] It is assumed here that any activity in the face of danger is normally more reinforcing than passive acceptance, even though this activity is not effective in averting danger.